

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

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Applicant ....., Microsoft Corporation

Group Art Unit ..... 2164

Examiner ..... Samuel G. Rimell

Attorney's Docket No. ..... MS1-0752US

## Title: Personal Centralized Alert Delivery Systems and Methods of Use

## APPEAL BRIEF

To: Board of Patent Appeals and Interferences

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### (1) Real Party in Interest

The real party in interest is the Microsoft Corporation, the assignee of all right and title to the subject invention.

## **(2) Related Appeals and Interferences**

None.

### (3) Status of Claims

Claims 1-42 are pending in this Application, and are set forth in the Appendix ofAppealed Claims on page 21. Claims 1-42 stand rejected. Claims 1-42 were originally filed in the Application. Claims 1, 12, 27, 35, 40, and 41 were amended in an amendment filed April 20, 2005. Claims 10-13 were amended in an amendment filed January 6, 2006. No claims have been allowed.

Claims 1-42 are subject to this appeal and stand rejected as set forth in a Final Office Action dated April 11, 2006. Specifically:

Claims 1-42 are rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent 6,092,102 issued to Wagner (herein referred to as, "Wagner") (April 11, 2006 Office Action p.2).

#### **(4) Status of Amendments**

A rejection to claims 1-42 was issued on October 20, 2004 whereupon Applicant responded to address the Examiner's rationale for the rejection and to amend claims 1, 12, 27, 35, 40, and 41. The claim amendments were entered, and subsequently, a final rejection was issued on July 13, 2005. Applicant submitted a response to the Final Office Action, arguing that the final rejection was premature in that it raised new grounds for rejection. An Advisory Action was then issued on September 28, 2005, indicating that the proposed amendments would not be entered. The Advisory Action did not address Applicant's argument that the final rejection was premature. After a telephone interview between Applicant's representative and the Examiner on October 13, 2005, the previously issued Final Office Action was withdrawn. A second Final Office Action was then issued on November 7, 2005. Claims 10-13 were amended in a response dated January 6, 2006, which was filed with a Request for Continued Examination. A Final Office Action was then issued on April 11, 2006. A Notice of Appeal was filed on June 9, 2006. No amendments have been filed subsequent to the Examiner's final rejection dated April 11, 2006.

**(5) Summary of Claimed Subject Matter**

Following is a concise explanation of each independent claim involved in the Appeal (claims 1, 16, 28, and 35), which includes specification references and exemplary drawing reference characters. As explained, the independent claims are not limited solely to the elements identified by the reference characters.

The claimed subject matter is directed to a centralized alert delivery system that receives alerts from any number of multiple alert sources, and then delivers the received alerts to the user according to one or more specified delivery modes. Specifically:

Claim 1 describes receiving an alert for a user from one of multiple alert sources (*Fig. 3, Fig. 12, and page 16, lines 13-15*); mapping the alert to a delivery mode (*Fig. 3, Fig. 12, and page 16, line 15 – page 17, line 4*); and transmitting the alert to the user according to the delivery mode (*Fig. 3, Fig. 12, and page 17, lines 4-9*).

Claim 16 describes a centralized alert delivery system that includes an input/output (I/O) module (406) configured to receive alerts from multiple alert sources; a mapping module (426) configured to map an alert to a delivery mode (424); and a communications layer (418) that interfaces to one or more communications modules (428, 430, 432), the communications layer being configured to receive the mapped alert and deliver the alert via a communications module according to the delivery mode associated with the alert. (Fig. 4 and page 18, line 11 – page 20, line 5.)

1        Claim 28 describes a computer system that includes a processor (402); an  
2 I/O module (406); memory (412); and an alert center (414) stored in the memory,  
3 the alert center including: a subscription layer (416) configured to receive an alert  
4 from an alert source and assign a delivery mode to the alert; and a communications  
5 layer (418) configured to transmit the alert according to a delivery mode assigned  
6 to the alert. (Fig. 4 and page 18, line 11 – page 20, line 5.)  
7

8        Claim 35 describes one or more computer-readable media containing  
9 computer-executable instructions that, when executed on a computer perform the  
10 following: receiving an alert from one of a plurality of alert sources (306);  
11 determining a delivery mode (600) which specifies a delivery method (502) by  
12 which the alert should be forwarded to a user; and transmitting the alert to the user  
13 according to the delivery mode. (Fig. 12, page 20, line 20 – page 21, line 3, and  
14 page 29, line 20 – page 30, line 6.)  
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**(6) Grounds of Rejection to be Reviewed on Appeal**

Claims 1-42 are rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent 6,092,102 issued to Wagner (herein referred to as, "Wagner") (4/11/2006 Office Action p.2).

## (7) Argument

A. Claims 1-42 are not anticipated by Wagner.

Applicant describes and claims features of a centralized alert delivery system that receives alerts for its subscribers from various alert sources. The centralized alert delivery system categorizes the alerts according to the source of the alert or the content of the alert. Subscribers pre-specify one or more delivery modes for each of the alert categories in which they are interested. When the centralized alert delivery system receives an alert for a subscriber, the system forwards the alert to the subscriber according to the one or more pre-specified delivery modes. If an attempt to deliver an alert using a first delivery mode fails, the centralized alert delivery system may attempt to deliver the alert using a second delivery mode. (*Application, Abstract.*)

**b. Claims 1-9 and 11-15**

Wagner does not describe “receiving an alert for a user from one of multiple alert sources,” as claimed.

Wagner describes a notification system that receives information, analyzes the received information, and then generates and delivers alerts based on the analyzed information. (*Wagner, Abstract; col. 6, lines 24-44.*)

1 Independent claim 1 recites:  
2

3 A method, comprising:  
4 receiving an alert for a user from one of multiple alert sources;  
5 mapping the alert to a delivery mode; and  
6 transmitting the alert to the user according to the delivery  
7 mode.

8  
9 In contrast to the method of claim 1, Wagner describes **generating** an alert  
10 based on received information. Wagner does not describe “receiving an alert for a  
11 user from one of multiple alert sources,” as claimed. Wagner, FIG 1, is shown  
12 below:

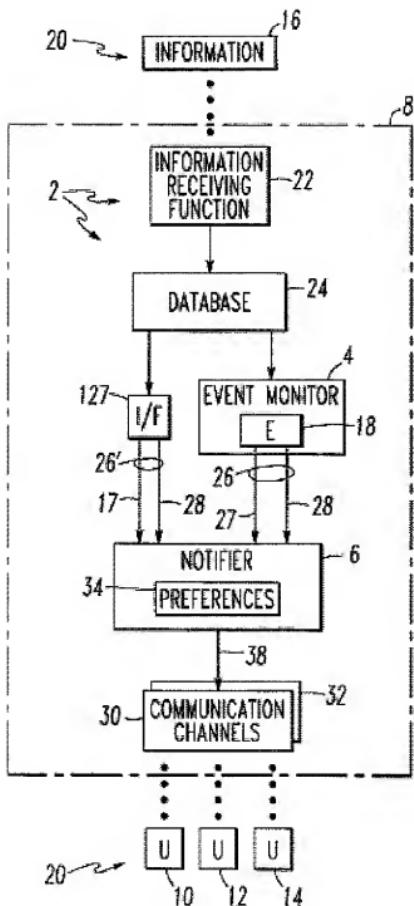


FIG. 1

1 The Office states that Wagner, "col. 6, lines 30-46 describes the general concept of  
2 receiving information and generating an alert. As seen in FIG. 1, the alert gets  
3 generated at (26) and is received by module (34) which performs mapping  
4 functions." (*Office Action, page 2.*)

5 Wagner, col. 6, lines 24-32, specifically states:

6 The notification system **8** includes an information receiving  
7 function **22** of the information processing system **2** for  
8 receiving the information **16** as received information; a  
9 database or data warehouse **24** of the information processing  
10 system **2** for storing the received information as stored  
11 information; the clinical event monitor **4** which analyzes the  
12 stored information to determine an event (E) **18** and  
13 generate an alert **26** including a message data structure **27**  
14 having a message, and partial or complete delivery  
15 instructions **28**."

16  
17 Wagner makes a clear distinction between the information (16) that is  
18 received and the alert (26) that is generated. Wagner indicates that as information  
19 is received, the information is analyzed, and an alert is generated. As stated in the  
20 portion of Wagner shown above, alerts (26) are generated by the clinical event  
21 monitor (4). As shown in Wagner, FIG. 1, alerts (26) are generated by the clinical  
22 event monitor (4) and transmitted to the notifier (6).

23 Applicant's understanding is that the Office is equating the receiving of  
24 alerts (26) as performed by notifier (6) in the Wagner system with the, "receiving  
25 an alert for a user from one of multiple alert sources," as recited in claim 1. A

1 significant difference exists between the two, however, in that claim 1 recites,  
2 "receiving an alert ... **from one of multiple alert sources**," and Wagner only  
3 describes a single alert source, i.e., event monitor (4). Additionally, the Wagner  
4 system, as a whole, is a single alert source that generates alerts based on received  
5 information, and Wagner in no way describes, "receiving an alert for a user from  
6 one of multiple alert sources," as claimed. Accordingly, claim 1 is allowable over  
7 Wagner.

8  
9 Claims 2-9 and 11-15 are allowable by virtue of their dependency on claim  
10 1 (either directly or indirectly).

11  
12 **ii. Claim 10**

13  
14 Dependent claim 10 recites:

15 transmitting the alert to the user according to the first delivery  
16 action; and

17 transmitting the alert to the user according to the second delivery  
18 action if transmitting the alert to the user according to the first delivery  
19 action is unsuccessful.

20  
21 Wagner does not describe, "transmitting the alert to the user according to  
22 the second delivery action if transmitting the alert to the user according to the first  
23 delivery action is unsuccessful," as recited in claim 10.

1 The Office contends that the elements recited in Claim 10 are described in  
2 Wagner, Table V and column 14, lines 39-46. (*Office Action, page 3-4.*) Wagner,  
3 Table V is reproduced below:

COMMUNICATION CHANNEL CHARACTERISTICS					
Communication Channels	Time Intensity	Fail-safe	Security	Delivery cost	Capacity
2-way pager	Immediate	No	Encrypted	High	512 Bytes
2-way pager with fail-safe delivery	Immediate	Yes	Encrypted	High	512 Bytes
E-mail	Not Immediate	No	Not encrypted	Low	"Unlimited"
ToDo list	Not Immediate	Yes	Encrypted	Low	"Unlimited"

12 Table V only illustrates characteristics of various communication channels.  
13 For example, messages sent via a 2-way pager are encrypted, while messages sent  
14 via email are not encrypted. Furthermore, messages sent via a 2-way pager are not  
15 fail-safe, but messages sent via a 2-way pager with fail safe are fail-safe. Neither  
16 Table V, nor the cited sections of Wagner, describe, "transmitting the alert to the  
17 user according to the second delivery action if transmitting the alert to the user  
18 according to the first delivery action is unsuccessful," as recited in claim 10.

19 The Office cites Wagner, column 14, lines 39-46, which states:  
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21  
22  
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1 As shown in FIG. 3, for fail-safe communications channels,  
2 the communication channel manager 124 accepts an  
3 acknowledgement 125 of receipt of the message 38 from the  
4 user of the fail-safe communication channel. If the  
5 acknowledgement 125 is not provided by the user within a  
6 predefined time, then the message 38 is resent to the user  
7 and the process of checking for the acknowledgement 125 is  
8 repeated.

9

10 This section of Wagner only describes re-transmitting an alert using the  
11 same delivery method, and not “transmitting the alert to the user according to the  
12 second delivery action if transmitting the alert to the user according to the first  
13 delivery action is unsuccessful,” as recited in claim 10. Accordingly, for these  
14 reasons, and by virtue of its dependence on claim 1, claim 10 is allowable over  
15 Wagner.

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iii. **Claims 16-27**

Independent claim 16 recites:

A centralized alert delivery system, comprising:

an input/output (I/O) module configured to receive alerts from multiple alert sources;

a mapping module configured to map an alert to a delivery mode; and

a communications layer that interfaces to one or more communications modules, the communications layer being configured to receive the mapped alert and deliver the alert via a communications module according to the delivery mode associated with the alert.

In contrast to claim 16, Wagner describes receiving information, generating alerts based on the received information, and then transmitting the alerts to one or more users. Wagner does not describe, “an input/output (I/O) module configured to receive alerts from multiple alert sources,” as recited in claim 16. The Office contends that Wagner, “FIG. 1 illustrates an input/output module for inputting alert information (20) and outputting alerts to users (10, 12, 14).” (*Office Action, page 4.*) With reference to FIG. 1, which is reproduced above, Wagner clearly describes that the notification system (8) receives information (20). The event monitor (4) analyzes the information to determine an event (18) and **generate an alert (26).** (*Wagner, column 6, lines 24-31.*) The information (20) that is received in the Wagner system is not an alert, but rather, information that can be analyzed

1 and from which an alert may be generated. Wagner does not describe, "an  
2 input/output (I/O) module configured to **receive alerts** from multiple alert  
3 sources," as claimed. Accordingly, claim 16 is allowable over Wagner.

4

5 Claims 17-27 are allowable by virtue of their dependency on claim 16.

6

7 **iv. Claims 28-34**

8 Independent claim 28 recites:

9

10 A computer system, comprising:

11 a processor;

12 an I/O module;

13 memory; and

14 an alert center stored in the memory, the alert center  
15 including:

16 a subscription layer configured to receive an alert from an  
17 alert source and assign a delivery mode to the alert; and

18 a communications layer configured to transmit the alert  
19 according to a delivery mode assigned to the alert.

20

21 In contrast to claim 28, Wagner describes generating an alert based on  
22 received information, and does not describe receiving an alert from an alert source,  
23 as claimed. As stated above with reference to claim 16, Wagner clearly describes  
24 that the notification system (8) receives information (20). The event monitor (4)  
25 analyzes the information to determine an event (18) and generate an alert (26).

1 (Wagner, column 6, lines 24-31.) The information (20) that is received in the  
2 Wagner system is not an alert, but rather, information that can be analyzed and  
3 from which an alert may be generated. Wagner does not describe, “a subscription  
4 layer configured to receive an alert from an alert source,” as claimed.  
5 Accordingly, claim 28 is allowable over Wagner.

6

7 Claims 29-34 are allowable by virtue of their dependency on claim 28.

8

9 **v. Claims 35-42**

10 Independent claim 35 recites:

11

12 One or more computer-readable media containing computer-  
13 executable instructions that, when executed on a computer, perform  
14 the following:

15 receiving an alert from one of a plurality of alert sources;

16 determining a delivery mode which specifies a delivery  
17 method by which the alert should be forwarded to a user; and

18 transmitting the alert to the user according to the delivery  
19 mode.

20

21 In contrast to claim 35, Wagner describes generating an alert based on  
22 received information, and does not describe, “receiving an alert from one of a  
23 plurality of alert sources,” as claimed. The Office cites that the same rationale for  
24 rejecting claim 35 was used in rejection claim 1. (*Office Action, page 6.*)

1 Accordingly, claim 35 is allowable over Wagner for reasons similar to those stated  
2 above with reference to claim 1.

3

4 Claims 36-42 are allowable by virtue of their dependency on claim 35.

5

6 **Conclusion**

7 The Office's basis and supporting rationale for the §102 rejection of claims  
8 1-42 is not supported by the express teachings of Wagner. Applicant respectfully  
9 requests that the §102 rejections be overturned and that pending claims 1-42 be  
10 allowed to issue.

11

12 Respectfully Submitted,

13

14 Dated: 8/3/06

15 By: Kayla D. Brant

16 Kayla D. Brant

17 Reg. No. 46,576

18 (509) 324-9256 x 242

## (8) Claims Appendix

1. A method, comprising:

receiving an alert for a user from one of multiple alert sources;

mapping the alert to a delivery mode; and

transmitting the alert to the user according to the delivery mode.

2. The method as recited in claim 1, wherein mapping the alert further

comprises mapping the alert according to the source of the alert.

3. The method as recited in claim 1, wherein mapping the alert further comprises mapping the alert according to alert content.

4. The method as recited in claim 1, wherein the delivery mode specifies a delivery method used to deliver the alert and wherein the transmitting further comprises transmitting the alert to the user via the delivery method indicated in the delivery mode.

5. The method as recited in claim 1, wherein the delivery mode specifies a delivery action that indicates a delivery method to be used to deliver the alert and whether an acknowledgement to the alert should be expected, and the method further comprises waiting for an acknowledgement to the alert if the delivery mode indicates that an acknowledgement to the alert should be expected.

1       6. The method as recited in claim 5, wherein the delivery action  
2 specifies a time period to wait for an acknowledgement if an acknowledgement to  
3 the alert is expected, and wherein the waiting further comprises waiting the  
4 specified time period for an acknowledgement to the alert.

5  
6       7. The method as recited in claim 1, wherein:  
7           the delivery mode further specifies a first delivery method used to deliver  
8 the alert;

9           the delivery mode further specifies a second delivery method used to  
10 deliver the alert; and

11           the transmitting further comprises transmitting the alert to the user via the  
12 first delivery method and the second delivery method as indicated by the delivery  
13 mode.

14  
15       8. The method as recited in claim 1, wherein the mapping further  
16 comprises:

17           defining one or more categories of alerts;  
18           assigning a delivery mode to each category; and  
19           categorizing the alert, thereby mapping the alert to the delivery mode of the  
20 category.

21  
22       9. The method as recited in claim 8, further comprising assigning a  
23 priority to each category, and wherein the assigning a delivery mode further  
24 comprises assigning a delivery mode to a category based on the priority assigned  
25 to the category.

1  
2 10. The method as recited in claim 1, wherein:

3 mapping the alert to the delivery mode further comprises:

4 mapping the alert to a primary delivery block specifying a first  
5 delivery action, and a secondary delivery block specifying a second  
6 delivery action; and

7 transmitting the alert to the user according to the delivery mode further

8 comprises:

9 transmitting the alert to the user according to the first delivery  
10 action; and

11 transmitting the alert to the user according to the second delivery  
12 action if transmitting the alert to the user according to the first delivery  
13 action is unsuccessful.

1       11. The method as recited in claim 10, wherein the first and second  
2 delivery actions each indicate a delivery method to be used to deliver the alert and  
3 whether an acknowledgement to the alert should be expected, and the method  
4 further comprises:

5           waiting for an acknowledgement to the transmission of the alert according  
6 to the first delivery action if the first delivery action indicates that an  
7 acknowledgement to the alert should be expected; and

8           waiting for an acknowledgement to the transmission of the alert according  
9 to the second delivery action if the second delivery action indicates that an  
10 acknowledgement to the alert should be expected, provided the alert is transmitted  
11 according to the secondary delivery action.

12       12. The method as recited in claim 10, wherein:

13           the first delivery action indicates first and second delivery methods; and  
14           the transmitting the alert to the user according to the second delivery action  
15 further comprises transmitting the alert to the user according to the second  
16 delivery action if either the first delivery method or the second delivery method  
17 indicated in the first delivery action fails to result in transmission of the alert to the  
18 user.

1           13. The method as recited in claim 10, wherein:

2           each of the first and second delivery actions further comprises:

3           a delivery method to be used to deliver the alert;

4           whether an acknowledgement to the alert should be expected;

5           a time period to wait for an acknowledgement if an  
6           acknowledgement to the alert is expected; and

7           the method further comprises:

8           waiting for an acknowledgement to the transmission of the alert  
9           according to the fist delivery action if the first delivery action indicates that  
10           an acknowledgement to the alert is expected; and

11           waiting for an acknowledgement to the transmission of the alert  
12           according to the second delivery action if the second delivery action  
13           indicates that an acknowledgement to the alert is expected, provided that  
14           the alert was transmitted according to the secondary delivery action.

1           14. The method as recited in claim 10, wherein the primary delivery  
2 block and the secondary delivery block each specify a first delivery action that  
3 indicates a first delivery method to be used to deliver the alert and whether an  
4 acknowledgement to the alert should be expected, and a second delivery action  
5 that indicates a second delivery method to be used to deliver the alert and whether  
6 an acknowledgement to the alert should be expected, the method further  
7 comprising:

8           waiting for an acknowledgement to the transmission of the alert according  
9 to each delivery action of the primary delivery block that indicates that an  
10 acknowledgement to the alert should be expected; and

11           waiting for an acknowledgement to the transmission of the alert according  
12 to each delivery action of the secondary delivery block that indicates that an  
13 acknowledgement to the alert should be expected, provided the alert is transmitted  
14 according to the delivery actions of the secondary delivery block.

15  
16           15. The method as recited in claim 14, wherein each delivery action that  
17 indicates to wait for an acknowledgement specifies a time period to wait for an  
18 acknowledgement, and wherein waiting for an acknowledgement further  
19 comprises waiting the specified time period for an acknowledgement.

1       16. A centralized alert delivery system, comprising:  
2       an input/output (I/O) module configured to receive alerts from multiple  
3       alert sources;  
4       a mapping module configured to map an alert to a delivery mode; and  
5       a communications layer that interfaces to one or more communications  
6       modules, the communications layer being configured to receive the mapped alert  
7       and deliver the alert via a communications module according to the delivery mode  
8       associated with the alert.

9  
10      17. The centralized alert delivery system as recited in claim 16, wherein  
11       the mapping module is further configured to map the alert according to the source  
12       of the alert.

13  
14      18. The centralized alert delivery system as recited in claim 16, wherein  
15       the alert further comprises content, and wherein the mapping module is further  
16       configured to map the alert according to the content of the alert.

17  
18      19. The centralized alert delivery system as recited in claim 16, wherein  
19       the delivery mode specifies a delivery action that indicates a delivery method by  
20       which an alert associated with the delivery mode is transmitted.

21  
22      20. The centralized alert delivery system as recited in claim 19, wherein  
23       the delivery method is chosen from one of the following delivery methods: e-mail,  
24       instant messaging, SMS (short message service) messaging.

1        21. The centralized alert delivery system as recited in claim 16, wherein  
2 the delivery mode further comprises one or more delivery blocks, each delivery  
3 block including one or more delivery actions, each delivery action specifying:

4            a delivery method by which an alert associated with the delivery mode is  
5 transmitted;

6            whether an acknowledgement to the alert is expected; and

7            if an acknowledgement to the alert is expected, a time to wait for the  
8 acknowledgement.

9  
10        22. The centralized alert delivery system as recited in claim 16, wherein  
11 the delivery mode further comprises one or more delivery blocks, each delivery  
12 block including one or more delivery actions, each delivery action specifying a  
13 delivery method by which the associated alert is transmitted and whether an  
14 acknowledgement to the transmitted alert is expected.

15  
16        23. The centralized alert delivery system as recited in claim 22, wherein  
17 each delivery action that indicates an acknowledgement is expected further  
18 specifies a time to wait for the acknowledgement.

19  
20        24. The centralized alert delivery system as recited in claim 16, wherein:  
21            the delivery mode further comprises a primary delivery block and a  
22 secondary delivery block; and

23            the communications layer is further configured to deliver the alert via the  
24 one or more communications modules according to a delivery method specified in  
25 the primary delivery block and, if delivery according to the primary delivery block

1 fails, to deliver the alert according to a delivery method specified in the secondary  
2 delivery block.

3  
4 25. The centralized alert delivery system as recited in claim 16, wherein:  
5 the delivery mode further comprises a primary delivery block that includes  
6 a first delivery action that specifies a delivery method and a second delivery action  
7 that specifies a delivery method; and

8 the communications layer is further configured to deliver the alert via the  
9 one or more communications modules according to the delivery method specified  
10 in the first delivery action and according to the delivery method specified in the  
11 second delivery action.

12  
13 26. The centralized alert delivery system as recited in claim 25, wherein:  
14 the delivery mode further comprises a secondary delivery block; and  
15 the communications layer is further configured to delivery the alert via the  
16 one or more communications modules according to a delivery method specified in  
17 the secondary delivery block if the delivery of the alert according to either the first  
18 delivery action or the second delivery action in the primary delivery block fails.

1        27. The centralized alert delivery system as recited in claim 16, further  
2 comprising:

3            a categories module that identifies categories into which an alert may be  
4 categorized, wherein each category has an associated delivery mode; and

5            the mapping module is further configured to categorize the alert into a  
6 category identified in the categories module thereby associating the alert with the  
7 delivery mode of the category.

8

9        28. A computer system, comprising:

10            a processor;

11            an I/O module;

12            memory; and

13            an alert center stored in the memory, the alert center including:

14            a subscription layer configured to receive an alert from an alert  
15 source and assign a delivery mode to the alert; and

16            a communications layer configured to transmit the alert according to  
17 a delivery mode assigned to the alert.

18

19        29. The computer system as recited in claim 28, wherein the alert center  
20 is further configured to monitor for an acknowledgement that the alert was  
21 successfully delivered.

22

23        30. The computer system as recited in claim 28, wherein the alert center  
24 is further configured to monitor for an acknowledgement that the alert was  
25 successfully delivered and, if an acknowledgment is not received within a

1 specified time period, assign a backup delivery method to the alert and attempt to  
2 deliver the alert according to the backup delivery method.

3

4 31. The computer system as recited in claim 28, wherein:

5 the delivery mode further comprises a primary delivery block having a first  
6 delivery action and a second delivery action; and

7 the communications layer is further configured to transmit the alert  
8 according to the first delivery action and the second delivery action of the primary  
9 delivery block.

10

11 32. The computer system as recited in claim 31, wherein:

12 the delivery mode further comprises a primary delivery block having a  
13 delivery action and a secondary delivery block having a delivery action; and

14 the communications layer is further configured to transmit the alert  
15 according to the delivery action of the primary delivery block and, if delivery of  
16 the alert according to the primary delivery block fails, to transmit the alert  
17 according to the delivery action of the secondary delivery block.

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1           33. The computer system as recited in claim 31, wherein:  
2           the delivery action of the primary delivery block is a first delivery action;  
3           the primary delivery block further comprises a second delivery action;  
4           the first delivery action and the second delivery action further comprise a  
5           time to wait for an acknowledgement that the alert was received; and  
6           the communications layer is further configured to transmit the alert  
7           according to the delivery action of the secondary delivery block if an  
8           acknowledgement to the transmission of the alert according to the first delivery  
9           action or the second delivery action of the primary delivery block is not received  
10           with the time to wait identified by the first delivery action and the second delivery  
11           action, respectively.

12  
13           34. The computer system as recited in claim 28, wherein:  
14           the subscription layer further comprises a categories module that includes  
15           one or more categories into which an alert may be categorized, each category  
16           having a delivery mode associated therewith; and  
17           the subscription layer further comprises a mapping module configured to  
18           categorize an alert received from an alert source, thereby associating the delivery  
19           mode of the category with the alert.

1           35. One or more computer-readable media containing computer-  
2 executable instructions that, when executed on a computer, perform the following:  
3           receiving an alert from one of a plurality of alert sources;  
4           determining a delivery mode which specifies a delivery method by which  
5 the alert should be forwarded to a user; and  
6           transmitting the alert to the user according to the delivery mode.

7  
8           36. The one or more computer-readable media as recited in claim 35,  
9 wherein the determining a primary delivery mode further comprises:  
10           determining the alert source from which the alert originated;  
11           identifying a category associated with the alert source; and  
12           identifying a delivery mode associated with the category.

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14           37. The one or more computer-readable media as recited in claim 35,  
15 wherein the transmitting the alert further comprises:  
16           identifying a delivery action associated with the delivery mode; and  
17           transmitting the alert according to the delivery action.

18  
19           38. The one or more computer-readable media as recited in claim 35,  
20 wherein the transmitting the alert further comprises:  
21           identifying a first delivery action associated with the delivery mode;  
22           identifying a second delivery action associated with the delivery mode; and  
23           transmitting the alert according to the first delivery action and the second  
24 delivery action.

1       39. The one or more computer-readable media as recited in claim 35,  
2 wherein:

3           the delivery mode further comprises a primary delivery block that specifies  
4 one or more delivery actions, and a secondary delivery block that specifies one or  
5 more delivery actions; and

6           the transmitting the alert to the user according to the delivery mode further  
7 comprises transmitting the alert to the user according to the delivery action of the  
8 primary delivery block and, if the transmission fails, transmitting the alert to the  
9 user according to the delivery action of the secondary delivery block.

10  
11       40. The one or more computer-readable media as recited in claim 39,  
12 wherein:

13           the primary delivery block comprises first and second delivery actions; and  
14           the transmission of the alert according to the primary delivery block is  
15 deemed to fail if the transmission of the alert according to the first or second  
16 delivery actions fails.

17  
18       41. The one or more computer-readable media as recited in claim 39,  
19 wherein:

20           the primary delivery block comprises first and second delivery actions; and  
21           the transmission of the alert according to the primary delivery block is  
22 deemed to fail if the transmission of the alert according to both the first and  
23 second delivery actions fails.

1       42. The one or more computer-readable media as recited in claim 35,  
2 further comprising monitoring for an acknowledgement that the alert was  
3 successfully received by the user.  
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## (9) Evidence Appendix

None.

**(10) Related Proceedings Appendix**

None.